Live Oaks and Root Suckers

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A Fort Bend neighbor recently contacted our Hotline and Research Team with an SOS. The problem was his live oak and its root suckers. His plan was to remove them, apply a growth regulator, apply weed barrier, add soil and plant flowers. So, what could go wrong?

Let's begin with the tree and its roots. Live Oak trees are long-lived survivors. Their propensity to form root suckers and create thickets of trees is an important adaptation. However, only a small percentage of oaks send up suckers. It is a genetic trait some, not all trees have. Suckers often occur when roots hit a barrier, such as trees confined between a sidewalk and a driveway. Suckers can also occur when roots are disturbed or damaged by rototilling, drought, flood, or compaction. To learn more about the anatomy of trees and tree roots, enjoy this read from Jerry Parsons, Ph.D., Horticulture Specialist, Texas A&M AgriLife Extension (Retired): https://www.plantanswers.com/garden_column/sep04/4.htm

It's important to remember suckers are not acorn seedlings. If they were, you would be able to pull them up easily. What you see are growths from the roots of the existing tree; therefore, you do not want to spray an herbicide since that will harm the "mother" tree along with the sprouts.

John Begnaud, Texas A&M AgriLife Extension Horticulture Agent, (Retired) reminds us, "root suckers can be a real problem with some live oaks. A considerable amount of research has been done on the topic with no real answers yet."

"To date, there are no repellants, hormones or chemical sprays that reliably suppress or remove these suckers without harming the mother trees," he said. "Hand-grubbing or deeproot pruning can reduce these suckers for a few years, but they come back. Planting ground covers beneath these root sprouts, such as Asian jasmine which has a similar leaf form, can help hide these suckers". Read more at https://agrilifetoday.tamu.edu/2007/02/22/live-oaks-are-atexas-landscape-mainstay/.

While many homeowners wish the suckers would go away for good, the results are only fair. Removing suckers and applying a growth regulator will need to be repeated every year or so because you are asking the tree to change its natural growth habit.

Not advisable:

- 1. Applying a weed barrier (like landscape fabric) can set up an environment for fungus growth, root restriction and root decline.
- 2. Adding soil in the root area around the trunk to install a flowerbed can suffocate the roots.
- Too much watering in order to maintain a flowerbed in the root area around the trunk will result in root rot. (Asian Jasmine ground cover mentioned above does not require much water.)



One alternative is to let the suckers grow like a groundcover. This photo shows one year's growth of suckers after removal of heavy mulch and weed barrier. The suckers are occasionally trimmed with a weedeater. Color can be added with annual flowers in containers.

A groundcover of sprouts won't be a real option for many folks. Instead they can dig down and prune sprouts at the base, then cover the area with a solid layer of cardboard (add

landscape staples if needed), and cover all with a thick layer of mulch. The cardboard eventually breaks down.

Jerry Parsons wrote, "with all of this information about how much abuse a tree can endure, what are some guidelines that homeowners can follow to protect the precious trees and avoid a "near-death" experience?" Mark Peterson, Urban Forester for Texas Forest Service, gives guidelines at the end of Jerry Parsons' article at this link:

https://www.plantanswers.com/garden_column/sep04/4.htm .

Photo credit: Deborah Birge, Fort Bend County Master Gardener